

AMERICAN DENDROBATID GROUP

Newsletter No. 14

March-April 1994

The purpose of the ADG is to develop better communication between Dendrobatid breeders in North America. It is designed, by its format and bi-monthly distribution, to provide current information and new developments in the hobby. We hope that this will aid in solving some of the problems which confront us all. This newsletter appears bimonthly at a cost \$10.00 per calander year. Back issues for 1992 are available for \$5.00; back issues for 1993 are available for \$10.00.

Subscriptions, comments, articles, etc. should be sent to Charles Powell (2932 Sunburst Dr., San Jose, CA 95111 Tel.: (408) 363-0926) .

NOTES FROM THE EDITOR

We would like to include in an upcoming Newsletter a number of photographs illustrating various frogs. These photographs will be reproduce by color photocopy to keep the price reasonable. We are asking for submission of high quality prints or slides which will reproduce well. Please submit duplicates, not original work, to the Newsletter editor. Thanks.

INCUBATING *DENDROBATES TINCTORIUS* EGGS - TRIAL AND ERROR

by Alicia Pinzari

I am a novice hobbyist only obtaining my first four *Dendrobate*, *D. auratus* in October of last year. In late November I obtained three adult *D. tinctorius*. Within a week the female laid 4 eggs which were not viable. On December 19 she laid a clutch of 9 eggs. She laid her eggs on a hoyia leaf in a 2" x 3" ceramic plant container turned on its side. Mind you, I was not at all prepared for this occurrence to happen so quickly. Hence, no half coconut, no petri- dish, and certainly no plastic leaf, which is all the 'goodies' a hobbyist should have if they are seriously considering breeding Dendrobatid frogs. A quick call to an experienced hobbyist informed me that I must remove the eggs for artificial incubation because the papa frog probably would not take care of the eggs by keeping them moist. Okay. Now what?

I gently lifted off and separated five eggs, leaving four in the container just to see if indeed the male would care for the eggs, or not. My friend was right because within four days the eggs that were left in the terrarium disappeared. In fairness to the papa frog I must tell you that there is a second adult male *D. tinctorius* in the same terrarium. Both of them visited the eggs, so I was not able to determine if the papa frog ate or destroyed the eggs or if it was male number two.

The five eggs that I pulled I put onto a hoyia leaf for lack of a plastic leaf. Wondering

why they needed a leaf at all to change into tadpoles? Certainly the eggs are not going to know the difference. I placed leaf and eggs onto a small plastic container with a little water around the eggs. In four days I noticed that the hoya leaf began to rot at its edges (aha, that's why you have to use a plastic leaf). Two days later the rot reached the eggs and they began to go bad. Looking through a magnifying glass I could see that two eggs were still viable. The ultimate decision was to separate them yet again. I couldn't believe that I was doing all of this. Either way, the chances of survival of the eggs seemed to be ninety-five percent nil. I very carefully separated them and placed them onto a make-shift plastic disk which was placed into a small plastic cover. Using an eye dropper I placed a few drops of water around the edges of the eggs being careful not to drop water directly on the eggs. I kept them in my aqua brooder mainly to protect the small container from being accidentally knocked over or disturbed by a careless family member, bird, or whatever. I checked daily for water content and added a few drops if too much evaporated. Cheers! I could see development, they were still alive.

Egg number one changed into a tadpole in 15 days, number two in 17 days. I put them into a 2" x 2" plastic container with an inch of water. The water I used was prepared several days prior to egg hatching. For lack of a better words I shall refer to it as 'aged water.' Now, what to feed the critters? My decision was based on articles that I've read or from other dendrobatid hobbyists, and just plain old 'common horse sense.' What I finally settled on is Wardley Spirulina Plus® (algae), Tetra Min Bay Fish Food 'E'® for egg layers, and when the tadpoles were 15 days old I added Wardley Total Tropical Flak Food®. All the food is for tropical fish and can be found in most shops that sell fish for hobbyist.

Every other day I changed the water using 'aged water,' never water directly from the tap. It was left overnight or longer, and to every 16 ounces of water I added 9 or 10 drops of iodine, hopefully to prevent spindly-leg syndrome. There seem to be as many methods of using iodine as there are brands of iodine one can use. Not being able to find the brand my friend suggested, I settled for Providine Solution® 10%, (used for horses and cows; available iodine 1%), purchased in a feed store that sell horse food. I added the iodine to the water before it aged added duck weed (from my water gardens) at every water change. Baby fish like duck weed so I thought perhaps the tadpoles would eat it also. There is a tiny water fly that breeds in the duck weed and perhaps the tadpoles would find it delectable. It was worth a try, and certainly would not be harmful.

Presently, the tadpoles are 38 and 40 days old. I read that it takes 90 days before they began to metamorphous. It's difficult for me to know exactly how these tadpoles are progressing because I have no other Dendrobatid tadpoles to compare them with. It does seem, however, that they are growing at an average rate. They are approximately 7 mm long, not including the tail. A friend that breeds Dendrobatids told me that the longer they remain tadpoles the better. They will grow larger and be stronger froglets. It shall never cease to amaze me that through all of these trials and separations I ended up with two wiggly, healthy tadpoles. Oh yes, they out-grew their 2" x 2" home and are now happily ensconced in a 12" x 5" palace with 1.5" of water. More room to wiggle in and about rocks and duck weed. My female *D. tinctorius* laid nine more eggs last night. This time I am prepared.

HELPFUL HINTS

Dendrobatid Groups-Everyone who is interested in learning more about Dendrobatid frogs should consider joining the British Dendrobatid Group. For membership information contact Bob and Val Davis (5 Richards Rd., Standish, Wigan, WN6 0QU, England).

Other Dendrobatid groups include: Dutch (Dendrobatidae Nederland, c/o Hans Zwoferink, Roelf Bosmastraat 62, 7462 ME Rijssen, Holland) and the Swedish (c/o Douglas Potter, Dondegårdet 6, 42433 Angered, Sweden) groups.

Transport of juvenile frogs-For the past few years there have been interchanges of frogs between Holland and UK members of the British Dendrobatid Group. Generally, this has been by the purchase of juvenile frogs from Holland and I have bought them [into the country]. The frogs apparently grow well and most have now been bred. So what is the problem? At the same time as the purchase of juvenile frogs several of our members have brought tadpoles. Side by side comparisons have shown that the resultant frogs from tadpoles are considerably larger than those moved as small frogs. Without side by side comparisons everything appears to be as it should be. By Mick Bajcar [reprinted in part, with permission from the British Dendrobatid Group Newsletter, No. 19 (December, 1993)].

NEW LITERATURE

- Beyaard, M. J., 1990, A paludarium. *Dendrobatidae Nederland* (English translation), 7-12: 80-83.
- Bravenboer, R., 1990, High frequency fluorescent lights. *Dendrobatidae Nederland* (English translation), 7-12: 89-91.
- Ensinck, F. H., 1990, Breeding report: *Colostethus brunneus*. *Dendrobatidae Nederland* (English translation), 7-12: 6-12.
- Halfpenny, S. C., 1990, A method of sexing *Mantella aurantiaca* and some other frog species. *Dendrobatidae Nederland* (English translation), 7-12: 138-141.
- Knip, A. L. Ch., 1990, *Howeara Mini Primi* - a mini orchid. *Dendrobatidae Nederland* (English translation), 7-12: 55.
- Lotte, José and Lotte, Ben, 1990, In close-up: *Dendrobates tinctorius* Schneider, 1799 (2). *Dendrobatidae Nederland* (English translation), 7-12: 16-24.
- Neeleman, W. J., 1990, Breeding report: *Dendrobates tinctorius*, yellow back form from south-east French Guiana. *Dendrobatidae Nederland* (English translation), 7-12: 44-49.
- Rademaker, J., 1990a, *Dendrobates histrionicus confluens* (2) supplement breeding-report. *Dendrobatidae Nederland* (English translation), 7-12: 76-77.
- _____, 1990b, Breeding fruitflies. *Dendrobatidae Nederland* (English translation), 7-12: 126-127.
- Rodríguez, Lily and Myers, Charles W., 1993, A new poison frog from Manu National Park, southeastern Peru (*Dendrobatidae*, *Epipedobates*). *American Museum Novitates*, No. 3068: 1-15.

- Roo, N. J. de, 1990, Recipe for breeding fruitflies: an odourless and mite-free breeding medium for fruitflies. *Dendrobatidae Nederland* (English translation), 7-12: 56-58.
- Rossum, P. van, 1990, Solving problems with *Dendrobatidae*. *Dendrobatidae Nederland* (English translation), 7-12: 84-88.
- Schneider, Peter, 1990a, In close up: *Phyllobates vittatus* Cope, 1893. *Dendrobatidae Nederland* (English translation), 7-12: 52-54.
- _____. 1990b, In close-up: *Dendrobates pumilio*. *Dendrobatidae Nederland* (English translation), 7-12: 144-145.
- Simons, R., 1990, Breeding curl-flies - curled-winged mutation of *Musca domestica*. *Dendrobatidae Nederland* (English translation), 7-12: 104-106.
- Wevers, E., 1990a, Frogs in French Guiana. *Dendrobatidae Nederland* (English translation), 7-12: 112-122.
- Wevers, E., 1990b, *Dendrobates auratus* in Hawaii - imported *auratus* finds a spot in paradise. *Dendrobatidae Nederland* (English translation), 7-12: 123-125.
- Winter, F. de, 1990, Breeding report: *Phyllobates vittatus*. *Dendrobatidae Nederland* (English translation), 7-12: 68-73.
- Woeltjies, A. G. W., 1990, Frogs and legislation in the Netherlands. *Dendrobatidae Nederland* (English translation), 7-12: 128-137.
- Zwoferink, J., 1990a, Breeding report: *Dendrobates pumilio* Schmidt, 1857. *Dendrobatidae Nederland* (English translation), 7-12: 26-43.
- _____. 1990b, Orchids, *Dendrobatidae Nederland* (English translation), 7-12: 60-66.
- _____. 1990c, Mites versus fruitfly. *Dendrobatidae Nederland* (English translation), 7-12: 78-79.
- _____. 1990d, Breeding report: breeding *Dendrobatidae*. *Dendrobatidae Nederland* (English translation), 7-12: 92-103 (includes descriptions of breeding *Dendrobates tinctorius* from French Guyana, *D. auratus*, and *Epipedobates billingsi*).
- _____. 1990e, Orchids. *Dendrobatidae Nederland* (English translation), 7-12: 108-111.
- _____. 1990f, The husbandry of springtails - *Onychiurus armatus*. *Dendrobatidae Nederland* (English translation), 7-12: 142-143.

ADDS: For Sale

<i>Dendrobates auratus</i> 'Hawaii'	\$25 ea.	Eric Anderson
<i>Dendrobates leucomelas</i> 'Orange'	\$60 ea.	12231 Newberry Rd.
<i>Dendrobates tinctorius</i> 'Cobalt'	\$40 ea.	Gainesville, FL 32607
<i>Dendrobates tinctorius</i> 'Brazil'	\$60 ea.	
(lots of yellow)		
<i>Epipedobates tricolor</i> (3 morphs)	\$30 to \$50 ea.	
<i>Dendrobates auratus</i> 'El Cope'	\$25 ea.	Charles Nishihara
<i>Dendrobates imitator</i>	\$65 ea.	3271 Pinao St.
<i>Dendrobates tinctorius</i> 'Cobalt'	\$35 ea.	Honolulu, HI 96822

Charles Powell]
2932 Sunburst Dr.
San Jose, CA 95111

The Serpent's Egg (1809 Irving St., NW, Washington, D.C. 20010 Tel. (202) 462 9443) has various wild caught and captive breed frogs for sale Write or call for information.

Dendrobates pumilio - female
red with blue legs

Dendrobates leucomelas - male

Brice Noonan
2580 53rd Terrace SW
Naples, FL 33999
(813) 455 5385

Dendrobates azureus - female

Charles L. Powell, II
2932 Sunburst Dr.
San Jose, CA 95111
(408) 363-0926

NEW MEMBERS

Jaap-Jan DeGreef (Florida)
Antonio Gualtieri (Illinois)
Marc Lerner (California)



Dendrobates leucomelas F1. Photographed by Ed Oshaben.